

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 1200 6TH AVENUE SEATTLE, WASHINGTON 98101

DATE: See date of Section Chief signature

SUBJECT: CLEAN AIR ACT INSPECTION REPORT

Seaport Midstream Partners, Portland, Oregon

FROM: Daniel Heins, Environmental Scientist

Air Toxics Enforcement Section, EPA Region 10

THRU: Derrick Terada, Acting Section Chief

Air Toxics Enforcement Section, EPA Region 10

TO: File

BASIC INFORMATION

Facility Name: Seaport Midstream Partners Portland Terminal **Facility Location:** 9930 NW St. Helens Road, Portland, OR 97231

Date of Inspection: June 22, 2022

EPA Inspector(s):

1. Daniel Heins, Environmental Scientist

Other Attendees:

- 1. Brian Hoyman, Terminal Manager TransMontaigne
- 2. Brenda Donavan, Environmental Compliance TransMontaigne
- 3. Dirk Wold, Air Compliance Manager TransMontaigne
- 4. George Yun, Air Quality Inspector Oregon Department of Environmental Quality (DEQ)
- 5. Chris Moore, Air Quality Inspector DEQ

Contact Email Address: bhoyman@transmontaigne.com

Purpose of Inspection: Tanks inspection

Facility Type: Bulk fuels terminal / gasoline distribution facility

Arrival Time: 08:30 **Departure Time:** 10:30

Inspection Type: Announced Inspection

OPENING CONFERENCE

\boxtimes	Presented	Credentials

- Stated authority and purpose of inspection
- ☐ Provided Small Business Resource Information Sheet
- Mall Business Resource Information Sheet not provided. Reason: Not a small business

The following information was obtained verbally from Seaport representatives unless otherwise noted.

Company Ownership:

The Facility is owned by Seaport Midstream Partners LLC ("Seaport"). TransMontaigne owns a 51% stake in Seaport, while BP owns 49%. This ownership change occurred in November 2017, with the site previously owned and operated by BP West Coast Products, LLC.

Process Description:

The Seaport Midstream Partners Portland Terminal ("The Facility") is a bulk fuels terminal that receives, stores, blends, and transfers various fuels and petroleum products. Products handled are diesel, biodiesel, gasoline, ethanol, and fuels additives. The Facility receives product via pipeline, marine vessel, truck, and rail. The Facility distributes product via pipeline, truck rack, and marine vessel. The only product distributed by marine vessel is diesel. The thermal oxidizer controls vapors from the truck rack and is not set up to control marine loading vapors.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

Daniel Heins made observations with a FLIR GF320 optical gas imaging camera ("the FLIR"), capable of seeing hydrocarbon emissions plumes. EPA also used a Thermofisher TVA2020 flame ionization device ("the TVA") to measure the total hydrocarbon concentration in parts per million as methane (ppm) from vents or through hatches at the tops of tanks.

Daniel Heins observed emissions plumes out of tank 13, which was actively being loaded with ethanol at the time. He then took a reading from the center vent with a TVA.

Daniel Heins observed emissions plumes out of tank 1, containing gasoline. He then took a reading from the middle hatch with the TVA.

Daniel Heins made observations of tanks 3, 4, 5, 6, 7, 8, 11, and 12 with the FLIR and did not observe any plumes and thus did not take any TVA readings.

Photos and/or Videos: were taken during the inspection. See Appendix B. **Field Measurements:** were taken during this inspection. See Appendix C.

RECORDS REVIEW

Ahead of the inspection, Daniel Heins requested and reviewed a site map and a list of storage tanks with details of tank product, construction, size, and applicable air regulations.

CLOSING CONFERENCE

Provided U.S. EPA point of contact to the facility

Requested documents:

DIGITAL SIGNATURES

Daniel Heins requested tank levels of selected tanks at the Facility from the time of the inspection.

Concerns:

Daniel Heins noted the significantly elevated hydrocarbon concentrations at tank 1, and that concentrations would likely be significantly higher towards the bottom of the tank headspace. He noted that this could potentially be an indication of an issue in the performance of the internal floating roof in suppressing emissions and that there is potential that the concentrations may be high enough at the bottom to pose a safety concern.

Daniel Heins, Report Author
Derrick Terada, Acting Section Chief

APPENDICES AND ATTACHMENTS

Appendix A: Site Map

Appendix B: Digital Image Log

The files listed in this log are attachments to this report.

Appendix C: Field Measurement Data

APPENDIX A: SITE MAP



Above is a cropped version of the site map provided by Seaport to EPA in advance of the inspection. The Willamette River, to the northeast of the Facility, is at the top of the map

Product key:

ETH = Ethanol

ULR = Unleaded regular gasoline

PREM = Premium gasoline

ULSD = Ultra low sulfur diesel

BIO = Biodiesel

OOS = Out of service

APPENDIX B: DIGITAL IMAGE LOG

Inspector Name: Daniel Heins

Archival Record Location: US EPA Sharepoint

Camera type: FLIR GF320 optical gas imaging camera, for detecting hydrocarbon and VOC

emissions.

File Name	Date/Time	Tank	Description
MOV_0690.mp4	6/22/2022 9:24	Tank 13 (Ethanol)	Hydrocarbon plume out rim vent, viewed from
			ground. Tank loading.
MOV_0691.mp4	6/22/2022 9:33	Tank 1 (Gasoline)	Hydrocarbon plume out rim vent, viewed from
			directly under
MOV_0692.mp4	6/22/2022 9:33	Tank 1 (Gasoline)	Hydrocarbon plume out rim vent, viewed from
			directly under
MOV_0693.mp4	6/22/2022 9:45	Tank 1 (Gasoline)	Hydrocarbon plume out rim vent, viewed from
			next to it on top

APPENDIX C: FIELD MEASUREMENT DATA

		TVA	TVA Reading		
Tank #	Product	PPM	Location	IFR Type	Notes
13	Ethanol	125	center vent	steel pan	Actively loading
1	Gasoline	1500	middle hatch	aluminum	unloading, but only to truck rack
3, 4, 5, 6,					Observed with FLIR, nothing of
7, 8, 11, 12	Various	-	-	all steel pans	note

TVA instrument readings are given in parts per million (ppm) total hydrocarbon, as methane. All TVA reading locations are on the tank roofs.

Calibration and Instrument Information

Daniel Heins used a ThermoFisher Toxic Vapor Analyzer 2020 (TVA2020), designated as TVA A95732. The EPA TVA2020 response time is approximately 4.5 seconds.

	Calibration gas ppm	A95732 ppm
08:30 calibration check	500	494
08:30 calibration check	10000	1.02%
15:45 drift check	500	441
15:45 drift check	10000	9010

EPA calibration gases

Composition	Lot#	Expiration
Air zero grade THC <1 ppm	DBJ-1-24	March 2023
Methane in air 500 ppm	1-167-64	June 2024
Methane in air 10,000 ppm	228894	February 2023